

REMARKS

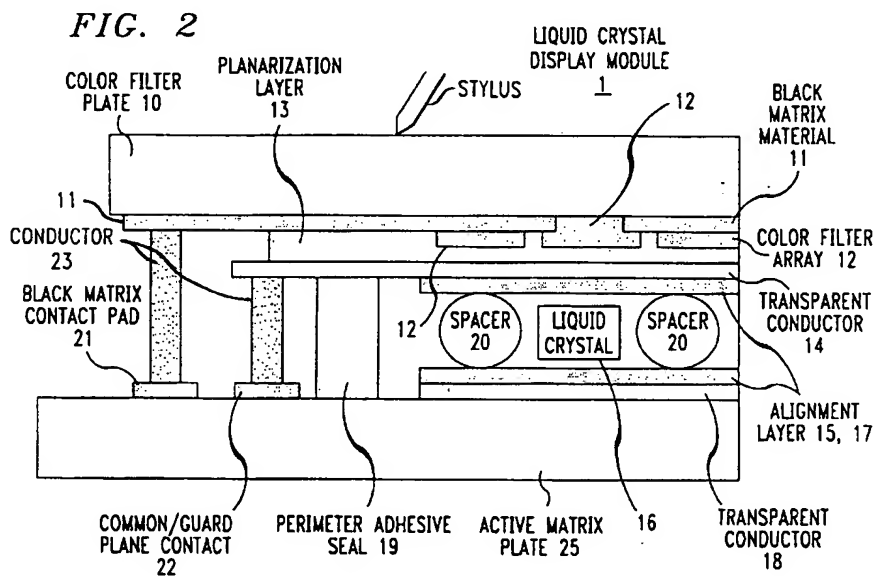
At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Non-Final Office Action dated March 13, 2009 has been received and its contents carefully reviewed.

Claims 28-31, 34-36, 38, 40-43, 46-48, 50-52, 54 and 56-58 are rejected. By this Amendment, claims 28, 40 and 50 have been amended. Accordingly, claims 28-31, 34-36, 38, 40-43, 46-48, 50-52, 54 and 56-58 are currently pending. This Amendment is based on the original specification and Drawings. No new matter is added. Reexamination and reconsideration of the pending claims is respectfully requested.

Claims 28-30, 34-36, 40-42, 46-48, 50-51, 54 and 56-58 are rejected under 35 USC 103(a) as being over US patent No. 5,847, 690 (“**Boie et al**”, hereinafter “**Boie**”) in view of US patent No. 6,762,752 (“**Perski et al.**”, hereinafter “**Perski**”) and further in view of US patent No. 5,657,011 (“**Komatsu et al.**”, hereinafter “**Komatsu**”). Claims 31, 38, 43 and 52 are rejected under 35 USC 103(a) as being unpatentable over “**Boie**” in view of “**Perski**” in view of “**Komatsu**”, as applied in claim 28 and further in view of US Patent No. 6,630,274 (“**Kiguchi et al**”, hereinafter “**Kiguchi**”). These rejections are respectfully traversed and reconsideration is requested.

Claim 28 is allowable over the cited references in that claim 28 recites a combination of features including, for example, “an EM sensor including first and second coil arrays formed of a transparent electrode on the second substrate, wherein each of the first and second coil arrays include a plurality of coils and each of the plurality of coils has first and second open ends and wherein the first coil array is perpendicular to the second coil array,” “a light-shielding layer and a color filter layer corresponding to the pixel electrodes are disposed on the EM sensor, wherein the light-shielding layer and the color filter layer are not coplanar with the EM sensor,” “an overcoat layer on the color filter layer and the light-shielding layer” and “a common electrode on the overcoat layer.”

In particular, referring col. 4, lines 48-51 of specification and Figs. 3A and 3B, Boie explicitly shows that capacitive touch sensor 30 includes conducting sensing electrodes 32, formed in black matrix material 11 (Fig. 3A) and a conducting guard electrode 31 (which is also the transparent conductor 14 of Fig. 3a/Fig.2- please see the below Figure). In this case, the transparent conductor 14 (the conducting guard electrode: 31) functions as an element in the capacitive touch sensor 30 with the conducting sensing electrodes 32 formed in the black matrix material 11.



Therefore, Boie does not teach or anticipate the features of “a light-shielding layer and a color filter layer corresponding to the pixel electrodes are disposed on the EM sensor, wherein the light-shielding layer and the color filter layer are not coplanar with the EM sensor,” “an overcoat layer on the color filter layer and the light-shielding layer” and “a common electrode on the overcoat layer” in amended claim 28.

The other cited references including Perski, Komatsu and Kiguchi, singly or in combination, fail to disclose the above features of “a light-shielding layer and a color filter layer corresponding to the pixel electrodes are disposed on the EM sensor, wherein the light-shielding layer and the color filter layer are not coplanar with the EM sensor,” “an overcoat layer on the color filter layer and the light-shielding layer” and “a common electrode on the overcoat layer” in amended claim 28. Therefore, the other cited references fail to remedy deficiencies of Boie.

Therefore, the cited references, singly or in combination, do not teach or suggest the claimed invention, as a whole. Accordingly, Applicants respectfully submit that claim 28 and claims 29-31, 34-36, and 38, which depend therefrom, are allowable over the cited references.

Furthermore, claim 40 is allowable in that this claim recites a combination of features not taught or suggested, alone or in combination, by the cited references.

Claim 40 is allowable over the cited references in that claim 40 recites a combination of features including, for example, “an EM sensor including first and second coil arrays formed of a transparent electrode is disposed on the light-shielding layer and the color filter layer, wherein the first coil array is perpendicular to the second coil array and the light-shielding layer and the color filter layer are not coplanar with the EM sensor.”

Office Action acknowledges that Boie does not explicitly disclose an EM sensor including first and second coil arrays formed of a transparent electrode on the light-shielding layer and the color filter layer, wherein the first coil array is perpendicular to the second coil array.

Further, Boie explicitly shows that the capacitive touch sensor 30 includes the conducting sensing electrodes 32 formed in black matrix material 11 (Fig. 3A) and a conducting guard electrode 31 (which is also the transparent conductor 14 of Fig. 3a/Fig.2). In this case, the conducting sensing electrode 32 of the capacitive touch sensor 30 is coplanar with the black matrix material 11, therefore Boie does not disclose the feature of “an EM sensor including first and second coil arrays formed of a transparent electrode is disposed on the light-shielding layer and the color filter layer, wherein the first coil array is perpendicular to the second coil array and the light-shielding layer and the color filter layer are not coplanar with the EM sensor” of amended claim 40.

The other cited references including Perski, Komatsu and Kiguchi, singly or in combination, fail to disclose the above features of “an EM sensor is disposed on the light-shielding layer and the color filter layer, wherein the light-shielding layer and the color filter layer are not coplanar with the EM sensor” in amended claim 40. Therefore, the other cited references fail to remedy deficiencies of Boie.

Therefore, none of the cited references, singly or in combination, teaches or suggests the feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 40 and claims 41-43, and 46-48, which depend therefrom, are allowable over the cited references.

Claim 50 is allowable over the cited references in that claim 50 recites a combination of features including, for example, "an EM sensor including first and second coil arrays formed of a transparent electrode is directly on the insulating layer, wherein each of the first and second coil arrays include a plurality of coils, and each of the plurality of coils has first and second open ends and wherein the first coil array is perpendicular to the second coil array" and "a light-shielding layer and a color filter layer on the second substrates, wherein the light-shielding layer and the color filter layer are not coplanar with the EM sensor." In the device recited in claim 50, EM sensor is directly on the insulating layer of the first substrate and the insulating layer is on the thin film transistor array and the pixel electrode. However, Boie show that the capacitive touch sensor 30 is on the color filter plate 10 with the black matrix material 11.

Therefore, Boie fails to disclose the feature of "an EM sensor is directly on the insulating layer which is formed over the thin film transistor array and the pixel electrodes on the first substrate, wherein the light-shielding layer and the color filter layer on the second substrate are not coplanar with the EM sensor" of amended claim 50.

The other cited references fail to remedy deficiencies of Boie.

Therefore, none of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. Accordingly, Applicants respectfully submit that claim 50 and claims 51-52, 54 and 56-58, which depend therefrom, are allowable over the cited references.

Applicants believe the application is in condition for allowance and early, favorable action is respectfully solicited. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

Application No.: 10/681,348
Amendment dated June 1, 2009
Response to Office Action dated March 13, 2009

Docket No.: 8733.923.00

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

Dated: June 1, 2009

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